

Title (en)
HETERO-TRANSGLYCOSYLASE AND USES THEREOF

Title (de)
HETEROTRANSGLYCOSYLASE UND VERWENDUNGEN DAVON

Title (fr)
HÉTÉRO-TRANSGLYCOSYLASE ET UTILISATIONS ASSOCIÉES

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Abstract (en)
[origin: WO2015044209A1] The present invention relates to a hetero-transglycosylase protein having cellulose:xyloglucan endotransglucosylase (CXE) activity in addition to mixed-linkage beta-glucan : xyloglucan endotransglucosylase (MXE) activity. The protein may comprise the amino acid sequence of any one of SEQ ID NOs: 2, 6 and 8 or a functional fragment thereof; or an amino acid sequence having at least 60% sequence identity to any one of SEQ ID NO: 2, 6 and 8, or to SEQ ID NO: 2 from amino acid 22 to 280, to SEQ ID NO: 6 from amino acid 26 to 283, or to SEQ ID NO: 8 from amino acid 29 to 287. The invention furthermore relates to an isolated nucleic acid encoding the protein described herein, a chimeric gene comprising, inter alia, the nucleic acid described herein, a vector comprising said chimeric gene, a host cell comprising said vector or said chimeric gene and an according transgenic plant. Further disclosed herein in are a method of producing a transgenic plant and a method of improving properties of cellulosic material.

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